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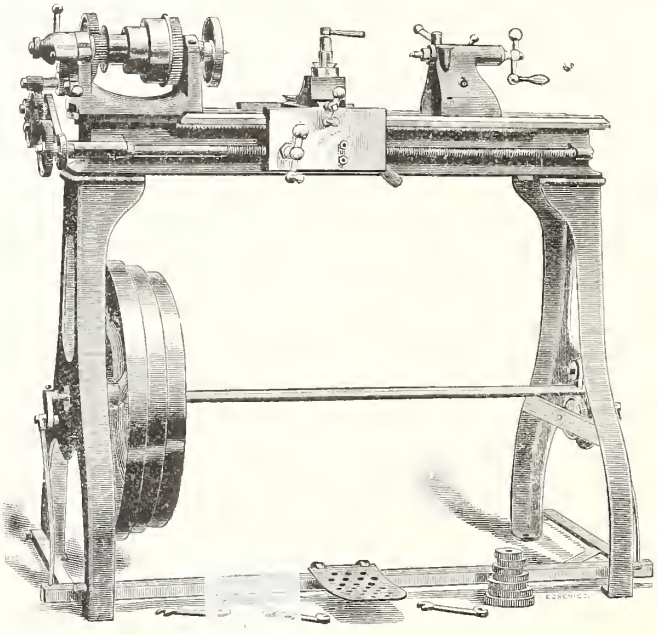

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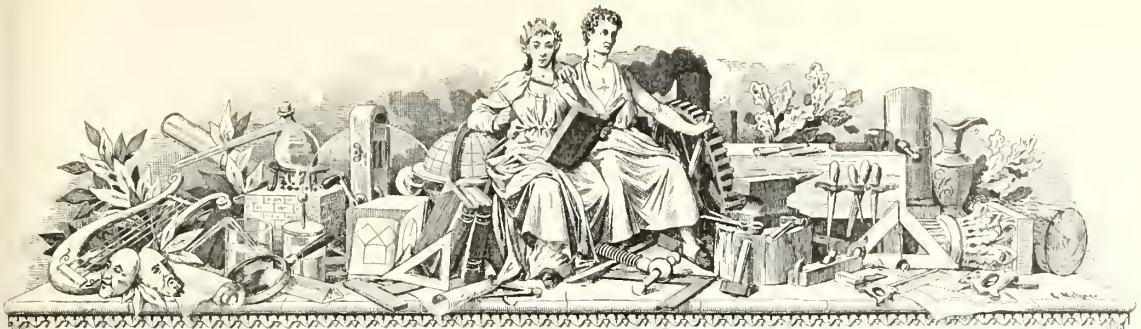

MIND AND HAND.

"EDUCATION IS THE CHEAP DEFENSE OF NATIONS."—BURKE.

VOL. II. No 1. INDIANAPOLIS, IND. MAY, 1896

MIND AND HAND.

Published in the interests of intellectual and manual education, by the students of The Industrial Training School.

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"Practical education is an education of the brain to intelligence and of the hand to skill. The combination will give the highest directive power."—RUNKLE.

· · EDITORIAL · ·

IT is the earnest endeavor of the editors of the MIND AND HAND to embody in the following pages a review of the year's work as done in the various departments of the school; and to do so in as interesting and attractive a manner as possible.

MIND AND HAND is a reflector of the school work; life and recreations of the students We send forth this little volume, clad in a garment of white and red, with the hope that it will be of interest to all and have numerous readers.

To those who have so kindly assisted our paper in any way whatever we extend our most cordial and sincere thanks.

BLANCHE COYLE

IN this busy world of ours, when each successive day makes the problem of life more complex, the only foundation of success is a thorough education.

Education in this sense is not a mere knowledge of reading, writing and arithmetic, but includes the finer arts and sciences as taught in high schools.

It is this latter work which the members of the February and June classes of '96 have just completed at the I. T. S, and the work has been thoroughly done.

The commencement exercises of the February class were held on the 29th of January. The speakers were Alice Hill, Agnes Herd, Edith Conner, Wilfred Vestal, Henry Leser, Bernice Smith and Frank Carson, whose essays, together with several selections of good music, constituted a very interesting programme.

The June class graduates on the 8th. The speakers will be Anna Browning, Eunice Hoefgen, Bertha Hixson, Gertrude Heim, Elmonda Eberhardt, Frank Baden and Foster Smith.

The School certainly has reason to feel proud of its two representative classes, and all hope that the members may continue through life as successfully as they have begun.

EDGAR F. KISER.

372556

CLASS OF FEBRUARY, 1896.

THE lovers of music in our school have many opportunities of help and recreation. Among many pleasant features of the I. T. S., music holds no secondary place.

The orchestra has become quite popular in its few appearances in public and, according to some of its admirers, will soon become famous. While we would be cautious about prophesying a future so glowing, we feel that it will become very good with practice.

The Opera Company, under the direction of Mrs. Wilkinson, is studying "The Pirates of Penzance." Besides the pleasure which the members gain from their work, they receive instruction which benefits them.

The weekly singing lessons are still a welcome diversion to our recitations, and the varied programmes with which our Prineipal oecasionally surprises us are enthusiastically received.

Many of the rooms are furnished with pianos, which the pupils use to good effect. As one passes the school during the noon hour he is greeted by a variety of tunes which float out upon the still air. "They have so many advantages, but do they appreciate them?" an interested observer asked. His eompanion was an optimist and he affirmed that we did.

EUNICE M. HOEFGEN.

OUR Industrial Training School is an institution of which we are justly proud. It is fast being recognized to be the finest of its kind in the West. But who should feel proud of this School, and is it situated so as to best accommodate its pupils? This School is not one of a community, nor even of one-half of the city. It belongs to and is for the benefit of the people.

It depends upon all for its funds. Its enthusiasm and life depends upon the cooperation and hearty good will of all its patrons. Is there any ground for objections as to its situation?

Some, probably, object on account of its being beyond the railroad tracks. But such an objection! Are the railroad trains, running at the rate at which they travel in this city, any more dangerous than our street cars?

You surely do not critieise its location on account of distanee. You must admit that the center of a circle is equidistant from all points in circumference. Were you ever informed that our School is situated very near the center of the eity.

This being the case, its position surely could not be bettered. Henee, it seems that the School Commissioners should be commended, rather than critieised, for their judgment in location.

FOSTER V. SMITH.

I. T. S. students hardly appreciate the beauty of some of the corners of the building. In all probability the reason is that they are so used to the pleasant rooms and corridors that but half a sense of the beauty of any particular spot strikes them. The drawing room has been very kind and generous in its loans of busts and statuettes, and the teachers and pupils have eagerly united as to the renting of pianos and the buying of plants and pictures.

A white plaster cast of a famous statue, a piano with a vase or two of bright flowers upon it, a few well chosen copies of famous masterpieces, and some palms or other pot plants, all artistically arranged, form a pleasant prospect for the eye to look upon. Sueh eorners are to be found in most of the rooms. The casts are seattered prodigally through the building, Room C having one of Angelo's Hercules, Room G the Venus de Milo and a bust of an Arab woman; the waiting room a bust

CLASS OF JUNE, 1896.

of the Belvedere Apollo, and other rooms as well supplied. One corner of the building is the delight of all the pupils who recite there. It is the German room. Since the windows are south and west, it is a very bright room. Begonias, umbrella plants, primroses, geraniums—all sorts of bright flowers fill the windows. A copy of "Beatrice Cenci" stands on a light easel, near which is a small table, on which rests a magnificent palm in a pretty jardiniere.

I. T. S. students have a right to be proud of the beauty of the school, for though the School Board deserves the credit of having first provided us with a pleasant building and many art treasures, the plants, flowers, pictures and pianos have generally been obtained by a hearty co-operation of teacher and pupil. VALENCIA EGAN.

THE editors would call special attention to the article by Dr. George Emory Fellows, of Chicago University, which appears in another column. Dr. Fellows was for several years a professor in Indiana University, and now holds the chair of History at Chicago. E. F. K.

PRINCIPAL'S PRIVATE OFFICE.

LITERARY DEPARTMENT.

THE GAME-KEEPER OF CHARLCOTE HALL TALKS.

"SAVE you, neighbor Greensheve. By the mass, it fares ill for ye that venture the wilds of unknown lands. Methinks the wisp o' grey on your ancient poll is thinner by far than mine, and I be a good four years your elder.

Ye need a priest to shrive ye gossip, for sueh tales as ye tell of the new country do pass all believing. Of a truth, travellers returning from that far land do tell of things most curious.

Mayhap it would please ye well to know how fares the world wi' the folk who found adventure enow for them i' the forests of Warwickshire. A score of years do show a vast change in men of our age. Old Gossip Patchen lieth i' the church-yard, and his widow has ta'en her another spouse. She hath a sad liking to wedded life and fate had thrice seen fit to set her free. Masters Ellis and Shackley have gone to London, Tinesby to the gallows for an ower love of plunder, and Smedley is at sea. But all the rest do bide i' the old places like unturned stones.

But, marry, the sun doth hide his face to some men and spend all his glory on others. Neighbor Skakespeare hath scaree a penny for the church—an less for ale—sinee Dame Fortune reversed her fickle wheel. Have ye heard of his ill luck? Nay? Well of a truth he is shent. Ye wot he knew the rote of making money, but as for keeping it he knew no more than doth a month old babe. He hath an uneommon free hand and he did lend and give like a lord till his own flesh did creep for want of cloak and the pangs of hunger gnaw for want of gold to buy him food. And now he lacketh naught but the mien and visage to be a beggar. His son, Will, hath risen sith his[2] father went down, for all London weepeth or holdeth his sides to see his wondrous plays. 'Twas chance, sheer chance, that set him up, for when Misfortune seems to cozen[3] us, she may turn our best friend at last.

This Will had scarcely left his swaddling clothes when ye sailed i' Falcon for Ameriea, and then neighbor Shakespeare had all that men conld wish i' the way of worldly goods. So the stripling did grow and flourish in an ower amount of mischief. I' faith, he was a lad to my liking, for the love of sport and adventure did lie as naturally in his heart as doth the love for singing in the linnet's throat. The leafy forests of Warwickshire were his play grounds. Do ye mind the mead about the grenewode? I warrant ye, ye never found a fairer sight i' the enchanted woods of America than the hazel copses, the treeless downs and the flowery mead, through whieh the Avon sparkles, in old Warwiekshire.

But the boy's nature allowed him not to be eontented with that which was rightfully his own. So he and his fellows did raid my lord Lucy's deer park. Ay, full oft hath his bow-string sung the death-knell of his graee's game.

Of a truth, he feared me not, though oft hath he fled from me i' the very glare of day. But his legs were winged with mischief, and I eould searce hope to eatch a prize runner of the May-Day games with my bandy legs. And then he had a fa-

mous good hand at the cross bow, and it likes me not to catch a quarrel [4] i' the heel.

But when neighbor Shakespeare grew ower generous to his own undoing; the lad found little time for his madcap pranks. As a first born son he must needs assist in the maintenance of the younger or helpless ones. And when he winged my lord's deer it was to silence a crying hunger, and not for wanton sport.

Pennry made Will uncommon saving. A wife, he thought, could help him save, and so he wedded Dickon Hathaway's daughter, Anne, eight years his elder. And now wi' wife and babes he found it hard to keep his larder full. So, to his old pranks again, he shot his grace's deer. Some other keepers caught him in the act. He was an old offender and I knew it would go hard wi' him. But I could not do withal.[5]

Well, in the courts they made him pay thrice the beasties value. Alas, poor, helpless Will! Starvation tracked him yarely,[6] and hate for my master did rankle in his heart; but his wit came to his aid and he wrote a sonnet on my lord and nailed it to the lodge gate. Now, although I am a loyal servant and true to Sir Thomas Lucy, privily, I tell ye, gossip, he spake most wonderfully straight at my lord's weaknesses.

My memory is no the sharpest more and I can not mind the jingle that he wrote, yet my sides do ache at the very thought of it. My lord waxed full wroth and threatened Newgate. Indeed, he delayed this vengeance to invent a worse, but while he waited the bird had flown.

Will went to London and left his wife and babes for us to keep while he did seek his fortune. Methinks he found it ower soon. For he is one of my lord Chamberlain's players, and Rumor hath it that his wage is greater and of a better surety than any of his gnild. And his wife, Anne, doth strut abroad in such a show of dress that the common folk do stare in wonder and envy.

Will hath written plays that hath won him favor with the Queen, so that it doth become Sir Thomas to make his peace with the Queen's friends. God 'ield ye, gossip, an' I drink more wi' ye, it will be to my own undoing, for e'en now I talk too freely for a good servant. But, friend, I did but give ye facts, which, an' it like ye, keep wi' a cautious tongue, lest my lord hear o' them, for truly, he liketh not a jest to his own hurt."

BESSIE MILLER.

Feb., '97.

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[1] shent—undone.

[2] his—the form of the personal pronoun "it" had not yet come into use.

[3] cozen—torment.

[4] quarrel—arrow.

[5] But I could not do withal—I could not help it.

[6] yarely—closely.

HUMAN NATURE.

Say, my friend, I beg you tell me,
Is there any honest reason,
Reason why a human being,
When the icy snows of winter
Freeze his feet and numb his body,
Thinks him of the days of summer?
Summer, when the air is balmy,
Sun is shining, wind is sighing.
All is peace and he so happy.
This his dream, which he will tell you,
Tell you with such honest pining,
Pining that is sad to think of.

When you see this selfsame mortal
In the sultry sun of August—
August, when the air is dusty,
Sun is hot and wind is dying;
All is heat, and he so wretched.
Then he wishes—how he wishes—
It were just a little cooler;
Cooler, as it was last winter.
Winter, when the dust is settled,
Flies are gone and water icy;
He was cool, and oh! so happy!

CHARLES NAGEL.

THE BICYCLE.

NOT many years ago it occurred to human brains to invent a machine that could be driven by the feet. After much experimenting, the machine was manufactnred. It consisted of two wheels: a large one, with a crank and pedal attachment, for moving the machine, and one much smaller, fitted in a steel frame, making a structure about six feet in height

The riding of this machine was somewhat dangerous, on account of its height and clumsiness. In a few years it was succeeded by a smaller machine, consisting of two wheels of the same height, and driven by means of a chain connecting with the hnd wheel and a cog wheel in the center of the frame.

Year by year this machine was improved and grew rapidly in public favor, nntil the present machine far surpasses the original, in lightness, comfort, usefulness and beauty of design.

Now bicycles are manufactured in every important town, and many fortunes have been made by their manufacture. Persons of all ages and sexes now ride wheels, and it is no uncommon sight to see whole families riding them on a pleasant evening, leaving the family carriage mouldering away among the cobwebs of the stable.

JOHN FLAHERTY,
Grade 9 B.

SOME EXPERIENCES OF WHITTIER.

THE home of Whittier was a rude, old-fashioned house, made of clapboards and logs. Although the outside was not very inviting, the inside was as pleasant and neat as any one could wish. In the sitting room, where all the family gathered, the walls were whitewashed and the furniture of the room was quite rude. The fireplace was a large, cheerful one, and when a fire was started it gave much heat. This fireplace was used for cooking purposes as well as for heating. In front of the fireplace were the crane and pendant trammels and the andirons with Turks' heads on them. Against the chimney was always a large pile of wood.

The earlier days of Whittier were spent in the happiness of such a home. In the winter he usually went to school at the district school not far from his home. He was a farmer's boy, so he had to work in the fields and help tend to the cows, horses, sheep and chickens. He was very useful and happy, and he has said himself that the happiest days of his life were his boyhood days

Whittier had a great love for the other members of the family, and especially did he love his youngest sister. He and she were always together, and many happy hours did they pass hunting flowers. When

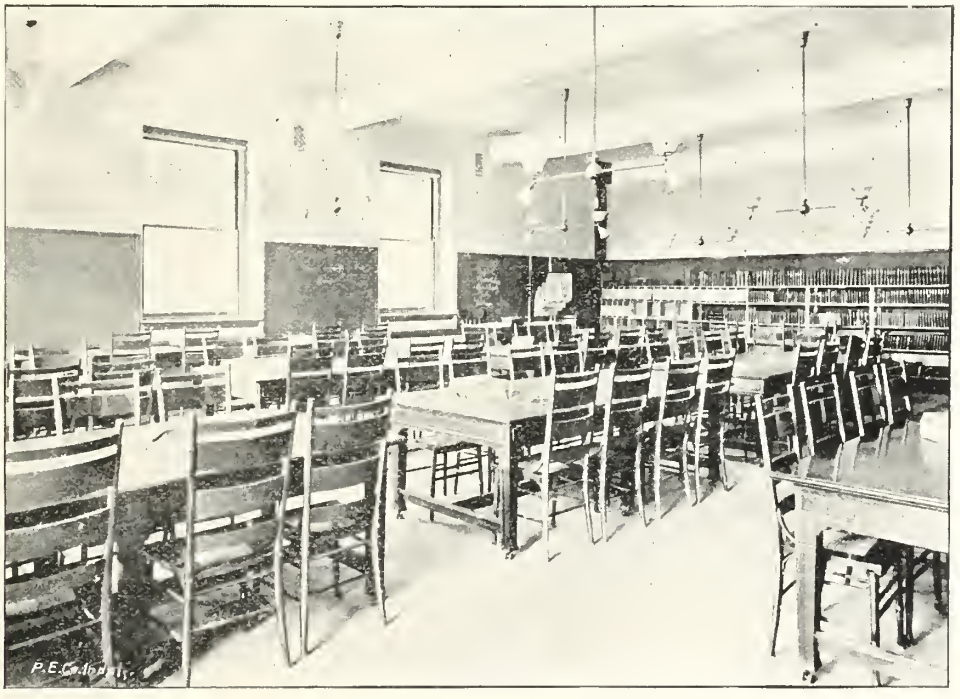
Whittier had grown quite old he and his brother were the only ones left of all that pleasant household. Those who had sat around the fire the nights they were snowbound are all gone now.

Whittier did not despair when he thought of this, for his religion was such that he believed that he would "somehow" and "somewhere" meet them again, since "He who knows our need is just." He believed that God's love was universal, and that the life which a person leads on earth, if it be good, would be the same in heaven.

Whittier's attitude toward slavery is shown by some of his beliefs, which were that all men are created free and equal, and that every one be considered as such. He believed in enslaving no human being, and he thought that all persons who believed as he did should do all in their power to uphold it. He did not believe in returning the slaves who had escaped from the South to their owners, although the law was that they should return them.

The attitude which Whittier took toward slavery had a great effect on his life. He devoted the whole of his earlier life to the writing of poems, which were against slavery. Some of the poems which he wrote were, "To Faneuil Hall," "Massachusetts to Virginia," and "Brown of Osswatomie." These are some of the greatest poetical works ever written against slavery.

BEN MINOR,
Grade 9 B.



LIBRARY.

THE COOKING CLASS AS SEEN BY A BOY.

ON entering the Cooking Class I heard the steady click-click of the spoons, and, not wishing to be behind the time, I asked, "What's being made?" The answer was Sal mon Sal-ad.

Let's see; I suppose that means salmon in it, doesn't it? Yes, and a great many more things. This time the recipe was so long that it had to be written on the blackboard, as no average person could remember it.

The articles to be mixed were, as near as I could get them, salmon lettuce leaf (just one), boiled dressing (I didn't know what that was composed of), a little mustard, some salt, and just a little speck of cayenne pepper (several reasons why no more cayenne was used). All these things were mixed and put in a neat little dish with olive oil or butter. Cooking being completed, the young cooks proceeded to wash dishes (for they must keep everything clean), which they do as well as a veteran Biddy. Dishes washed, they sit down to enjoy (?) their cooking.

One young lady wishing to try olive oil came to Miss Vail, with her mouth puckered up, as if she had run afoul of a green persimmon.

Personally I would prefer work in the forge room to attempting the preparation of the concoctions I saw there.

L. L. L.

A GIRL'S VISIT TO THE FORGING ROOM.

"O, the blacksmith's a fine, sturdy fellow;
Hard his hand, but his heart's true and mellow."

STURDY in truth he must be, and hard must be his hand, judging from some of the vigorous strokes I saw wielded when, pursuant to a request of one of the editors, I visited the forge room to relate what I saw.

Some very strange and interesting things met my eyes. The first that seemed unusually queer was that of starting the fire. I had noticed that clear liquid was poured over the coals, and wisely, as I thought, asked if it was coal oil. But, with a smile, the teacher kindly told me, to my astonishment, that it was water. Water? Why, I thought water extinguished fire; but again I was told it helped to support combustion better.

The lesson was making a hook out of five-eighths square iron. They made a piece of iron square, then, when it was heated, pounded one corner flat. With what heavy strokes they did wield that sledge! At each stroke showers of sparks flew in every direction, and kept me on the alert to avoid them, although I was told they were harmless. Then with the sledge and a device I can not name they made a hole through the iron, thrust it into the coals again, brought it out and put it on the round end of the anvil and shaped it better. The next step was to bend it. This was done by catching it in a square hole in the anvil and bending it over. Now it was completed, and what had been a piece of insignificant-looking iron was now a strong, well-shaped hook.

But the work was not all done by the brawny arms of the scholars. A huge piece of machinery, a steam hammer so-called, does its share also. It seemed to me a monster standing there with its mouth opening and closing, ready to crush anything within its reach. This huge piece of mechanism is used as a stronger sledge, and I was told it is sensitive to the slightest touch of the lever.

But, though I was interested, I could not stay always and watch them, so with the din of hammer and anvils in my ear I left the apartment thinking, after all, forging work was not at all disagreeable.

L. R.

FREEHAND DRAWING ROOM.

A VISIT TO THE INDIANAPOLIS INDUSTRIAL TRAINING SCHOOL.

I HAD heard much of the Industrial Training School to be built at Indianapolis, but was totally unprepared to see so large, well equipped, and successful an institution.

One is quite justified in being envious of the boy and girl of school age when he compares the advantages now offered in every good High School with those of the very best two or three decades ago.

In the Industrial Training School of Indianapolis there is found the combination of a regular High School with the opportunity for training the hands and eyes in a way commonly called "practical." I believe an intellectual education to be in every way as practical as any other education, but it is quite common to hear cooking, sewing, wood and iron working called "practical" as distinguished from the more exclusively intellectual studies.

All who have interested themselves in studying the question know that industrial studies have perhaps as strong an influence on the intellectnal life as studies which do not exercise the hand and eye.

The laboratory and laboratory methods have revolutionized education. The usefulness of the laboratory for students, first discovered and employed in physics, chemistry, botany, etc., has been extended to history, language and literature and to the study of the affairs of every day life.

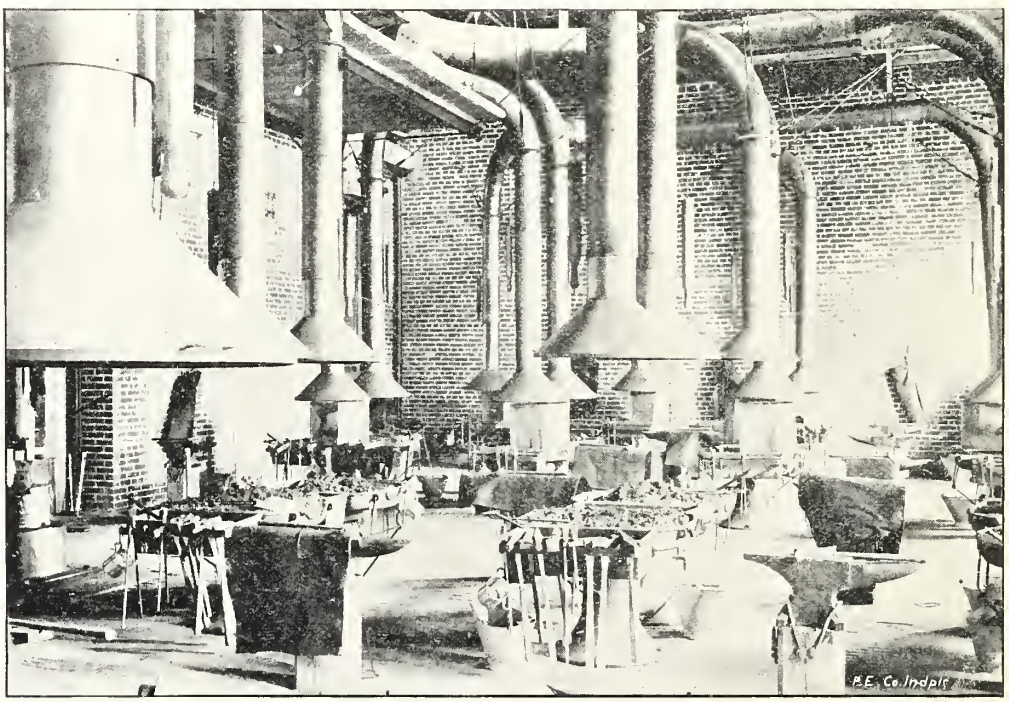
Manual training has been tried in many places and in as many ways. In one town, not in Indiana, a number of pupils go away from the high school several times a week to the manual training school, which is several blocks distant. The

classes in the high school are thus disorganized and both schools suffer from the system.

In the Indianapolis school, all under one roof, no time is lost and the courses and classes are so arranged that a high school course, including industrial training, or without it, may be taken. The advantages of the arrangement here are manifest at once to a visitor. The cooking and sewing departments are real laboratories, where the practical results of each pupil's work are reached by scientific steps. The shops for wood working and iron working, rooms for mechanical and for free-hand drawing, are in charge of competent and experienced teachers, and the interest of the pupils and teachers is so great that outsiders catch the spirit at once. My own impression, after a visit of two days, is that here in the Industrial Training School of Indianapolis is established the proper relation between an industrial and a secondary school.

A visitor is apt to speak most of the things that he can see, of laboratories and machines and equipments, but one should not overlook the fact that this school has a corps of strong teachers in history, mathematics, languages and literatures, who conduct a complete high school course. The competence of the teachers in all departments is evident. Manual training here is not a fad, but is so combined with other training as to put in practice the best educational theories of the present day.

George Emory Fellows,
University of Chicago.



FORGE ROOM.

SCIENTIFIC DEPARTMENT.

PHYSICS A PRACTICAL SUBJECT.

IN this practical day and age the question that arises when a person takes up some line of work, or considers it, is not so much concerning the intrinsic merit of the work, but the real value that it will be to the person himself.

The opinion is often expressed, especially among girls, that the study of Physics is of no practical value to them, that it will never do them any good. If there is one practical subject in the school course, it is Physics. First, the very knowledge that you gain, is that not of real use to you? You see the principle of the lever, the pendulum, the inclined plane, and many others every day. Is it not of real value to you to know the principles on which business and building are carried on; and the girls, particularly, to understand heat and ventilation, as every housekeeper should? The majority of pupils prefer literary to scientific subjects. Yet, how often during the study of the former one must have some knowledge of the latter before he can get the true thought of the writer. We have reached that period of development where one can not keep up with the times who has not some scientific knowledge. One must have a well-rounded education if he wishes to make his way in the world.

After all, it is not so much for the knowledge that we get that our school-training is intended, it is the strength that we gain in acquiring this information. Therefore, if Physics is distasteful to you, and you never care to give special attention to its study, you still have gained something inestimable in its value What teaches closer observation than this subject? Almost unconsciously one begins to notice what is about him more carefully, after having had the experimental work of a laboratory. The training that the mind gets in quickly seeing and accounting for phenomena in Physics helps the person to see and grasp ideas in his other work without difficulty. In every occupation this quickness of perception is essential; a good merchant must be alert in every line of his work and ready to grasp everything that would be to his advantage. This same subject also teaches systematic, accurate labor, both physical and mental, besides the ability to see the abstract in the concrete, to generalize, and to deduce truths from commonplace things; then, perhaps above all, close concentration of the mind is cultivated. It is simply impossible to understand and perform work in Physics without this concentration.

The word "education" literally means "a drawing out." A subject, then, that "leads" the mind to observe, to think quickly and accurately, to perform that most difficult and yet most essential thing, concentration of thoughts, is it not preeminently practical. HETTIE BOSLEY.

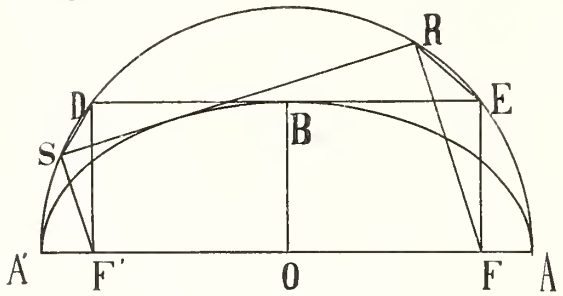
AN EXERCISE IN GEOMETRY.

PROVE that if F R and F′S are the two perpendiculars dropped from the foci upon any tangent to an ellipse, that $F R \times F'S = b^2$; b representing the semi-minor axis.

Let O be the center of the ellipse, A′A the major axis, and O B the semi-minor axis.

Let a tangent be drawn to the ellipse at B, and let D and E be the points in which this tangent meets perpendiculars drawn to it from the foci F′ and F respectively.

D, E, S and R lie in the circumference of the auxiliary circle, for the auxiliary circle is the locus of the foot of a perpendicular dropped from the focus of an ellipse to a tangent.



F R is parallel to F′S, and F E to F′D, since two lines in the same plane perpendicular to the same straight line are parallel. Therefore, angle S F′D equals angle R F E, having their sides parallel and extending in the same direction from their vertices.

Draw the straight lines S D and R E.

Angle D S R equals angle D E R, both being measured by one-half the same arc. Angles F′S R and F E D are both right angles, and hence equal. Therefore angles F′S D and F E R are equal, because if equals are added to equals the sums are equal.

Triangle F′S D is similar to triangle F R E, for they have two angles of the one equal to two angles of the other respectively.

$$F'S : F'D :: F E : F R;$$

but $$F'D = F E = O B.$$

Since they are perpendicular to the same straight line and lie between parallels. Hence,

$$F'S : O B :: O B : F R$$

$$O B = b.$$

Therefore,

$$F'S : b :: b : F R.$$

$$F'S \times F R = b^2.$$

Orval Mehring.

SKETCH ON THE TWELVE ROMAN TABLES.

THE dissensions between the two classes, patricians and plebeians, grew more fierce and bitter. The law hitherto had been simply handed down by tradition from one magistrate to another, and therefore always in the hands of the patricians. Gaius Terentilius Arsa proposed that the laws should be written. This proposition created a bitter party strife that lasted for ten years. During this time two concessions were made to the plebs. One, the incressing of the tribunes from five to ten; and the other, the distribution of property in the Aventine for the poorer classes.

But the plebeians clamored for more rights and new laws, and so at last ten men were elected from the centuries for the purpose of drawing up the laws. They were called Decemviri, and while they were holding office they had full control of the government. The tribunal was suspended, and affairs were so evened up that plebeians were eligible to the new office.

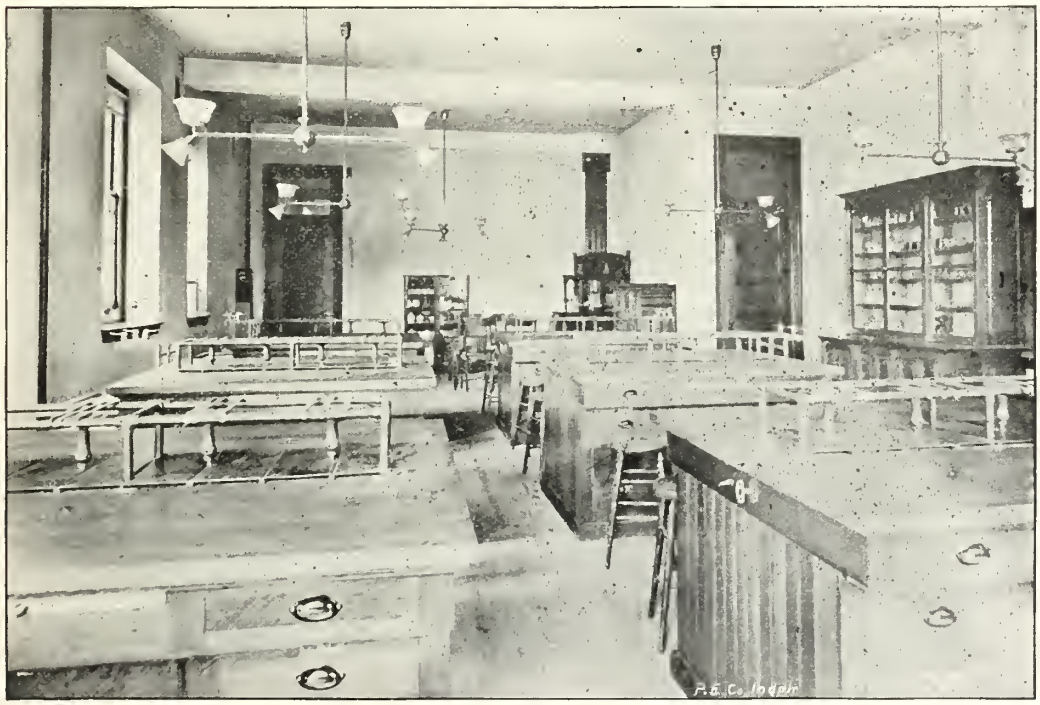
An embassy was sent to Greece to collect the famous Greek laws, for Greece was at her height of prosperity. Especially did they desire the laws of Solon. These were carefully studied, and at the end of the first year, in 451 B. C., the law, engraved on ten copper tables, was affixed in the Forum, in front of the Senate house. But these Decemviri did not retire at the end of the year. Some changes were made in the offices, allowing more plebeians in, and the next year two more tables were added, and thus originated the first and only legal code of Rome.

The substance of these laws were: First pertained to forms for calling any one into court; second treated of the punishment of a thief; third was on the treatment of frauds, limit of interest, gaining property

by long possession and treatment of those failing to pay interest in thirty days; fourth pertained to the rights of fathers in disposing of monstrously deformed children, and also of selling them; fifth provided for cases where the father of the family or a freedman failed to make a will; sixth dealt with transferral of property, selling of persons entitled to freedom, and of divorce laws; seventh pertained to damages due from the master of a beast which had harmed any one, and also to cases of incantation, of incendiary offenses, of insults, breaking another's limb, and of murders; eighth told the distance required between houses, being two and one-half feet, and that by-laws were allowed if they did not injure public laws; ninth stated that there could be no exceptionable laws in favor of individuals, and that bribing a judge was a capital offense; tenth pertained to funeral rites in allowing no man to be burned or buried in the city, and that there should be little expense on funerals except in cases of deceased having gained a crown.

The plebs. were better satisfied with these laws for they gave them more license and caused the magistrates to keep to the laws.

LULU ROBINSON.



COOKING LABORATORY.

CIVIL GOVERNMENT.

ENTHUSIASM? If anybody wishes to see an enthusiastic class let him look in any Friday afternoon on the present Civil Government class, when the two factions are hurling bomb-shells at each other in hot debate. Of course we do not debate as eloquently as our honorable and dignified Senators, but with good, common sense views that we have gathered from our various readings.

There are some very good speakers in the class, and an excellent drill for driving the point is obtained by the two minutes allowed each "orator." Often unexpected questions are put to the other side, and which no one feels competent enough to undertake. Too proud to let the opposing side win, up goes a timid hand or two, a speaker rises, stares at the floor as if an answer were there, stammers out a word or two, climaxed by "O—why—a—a—O, I forgot what I was going to say!" and shoots into his seat, shamefaced, while the class is convulsed with laughter.

A clinching argument in favor of protective tariff was given by a would-be orator the other day. He said that a man could buy a pair of boots a few years ago for two dollars and seventy-five cents; now he could buy the same pair of boots for one dollar and a quarter! And then he wondered why the class roared with laughter.

CLARA LEONARD.

THE CUBAN QUESTION.

THE question of the United States acknowledging the belligerency of Cuba has occupied much of the public attention lately. It is not a question to be decided by our sympathies. It is far too serious for that. It is a question which must be approached impartially from all sides. The whole principle of rebellion is wrong, just as the principle of Lynch Law is wrong. Truly, there are cases in which the violation of both these principles is not only justifiable, but necessary. There may be extenuating circumstances, as in the American Revolution, but in the case of Cuba we can not find those peculiar conditions. The American colonies were fighting with organized forces under an organized government. According to the latest authorities Cuba has no government, and her army consists of bands of guerrillas pouring down from the mountain regions upon the Spanish forces. Is the United States to recognize guerrilla warfare, and to recognize a government which does not exist? But if, out of sympathy, or, perhaps, the hope of some possible future benefits in the way of commerce, the United States should acknowledge Cuba to be in a state of belligerency, what would be the result? What benefit would it be to Cuba, and what effect would it have upon the United States itself? The aid to Cuba would be insignificant. The harm to America would be great. To be sure the Cubans would be encouraged and given a dignity among the nations, but that is practically all. The United States, as a nation, dare not send war supplies to Cuba, as that would be a direct violation of international law, and Spain would guard against the insurgents receiving aid from private individuals. As for the United States, such an action would be equivalent to declaring war against Spain, a nation with whom she is at peace. In accordance with the laws of nations, what right has the United States to do that? It is stated, moreover, on good authority that the rebellious Cubans acknowledge that their greatest hope lies in the possibility of a war between Spain and the United States on their account. This would turn Spain's attention away from them, and so give them an advantage.

With these facts before it, ought the United States acknowledge Cuba's belligerency? CAROLINE AUGUSTA HUNTER.

THE DELAY OF JUSTICE FOR CUBA.

SHALL we or shall we not recognize Cuban belligerency? This is the question which has proved a Gordian knot for Congress. It seems curious, however, that anything so clear should puzzle that august body. It seems curious that representative Americans (which our Congressmen surely are) can stand in our Senate and House of Representatives and defend the Spanish method of subduing the Cubans, when it has been characterized by such utter malignity and such outrages against all the laws of civilized warfare and of common humanity.

Spanish pride has been wounded by the Cubans, and the Spaniards are in a fever heat of rage and vindictiveness. The following extract from a publication in Spain voices, to some extent, the intensity of the public feeling: "Extermination is the only solution of the conflict. Let the romantic North Americans, hypocrite defenders of the Cuban insurgents, say what they wish * * * every suspect should be killed * * * the insurrection should be quenched in floods of blood." The article continues in much the same strain, displaying throughout a barbaric savagry totally unexpected in a journal of civilized people.

And yet Congress has remained comparatively inactive. Truly, when we see the very men who condemned England in her dilatory policy and who professed so much sympathy for the oppressed Armenians remain idle when just such horrors are committed on the very threshold of our own country, truly, I say, it is brought home most forcibly to us how much Congress has degenerated since the days of Daniel Webster. HARRY BADGER.

CHEMICAL LABORATORY.

POLITICAL LEADERSHIP OF UNITED STATES.

THE world is at this time considerably disturbed. Turkey's future is uncertain; the Cubans are tottering between despotism and republicanism. Venezuela and England have not yet settled the boundary dispute, and many other corners of both hemispheres are quivering with the universal thrill of *res novae*. Consequently, this is a period for setting forth to the world new modes of government, new ideas of international relationship and new policies.

The United States has been steadily advancing, gradually gathering strength, till now it is ready and able to give to the world advanced doctrines. When, in regard to the Venezuelan question, the United States stepped from the ranks of conservatism and, in effect, said to England: "We are protectors of republicanism; we shall investigate and give our decision without partiality," the world did not laugh. It was the stand of a nation which has given proof of its capability for leadership. The revival of the sentiment of the Monroe Doctrine has given to our nation a distinct individuality and to the world a noble policy. But this is only the first of many forward and upward steps yet to be taken by a nation in itself a departure from the usual civil polity. For instance, from arbitration may soon spring the abolishment of the standing army. Every nation has its period of leadership. The United States is now at the threshold of a brilliant age. IRENE COLLINGS.

HIGHER ALGEBRA.

IN 1637 Descartes, a Frenchman, noted that the position of a point in a plane is completely determined if its perpendicular distances from two straight lines in the plane, at right angles to each other, are known. These perpendicular distances he called the coördinates of the point. In a single indeterminate equation in X and Y —that is, one satisfied by an infinite number of values of X and Y—it was found that by taking associated values of X and Y as coördinates of a point, it was possible to graphically represent any number of solutions of the equation as points.

As the coördinates of every point satisfied the equation, it became possible by this method to produce a graphical representation of the equation; that is a line or curve which represented the path pursued by the point whose movement was determined by the condition laid down by the equation. This invention has been invaluable in all branches of scientific research, so much so that almost every science of to-day illustrates many results of its investigations by this method.

Besides becoming familiar with various means of solving an equation, it has been the purpose of the class in higher algebra to investigate the meaning of an equation by means of its graphical representation. Thus peculiar characteristics of several kinds of equations have been investigated.

For instance, a pair of simultaneous equations of the first degree has been shown to produce two straight lines which intersect at some point. The coördinates of this point satisfy the pair of simultaneous equations. A quadratic or an equation of higher degree generally represents a curve. The peculiarities of this curve are, that it can not cross the horizontal axis more times than are indicated by the highest exponent of the unknown term of the equation. Furthermore, if the curve does not cross the X-axis as many times as the highest exponent indicates, another truth is revealed. This last case shows that the equation has some imaginary roots, for the imaginary roots can

not be "plotted" by this method of rectangular coördinates. And since imaginary roots always occur in pairs when the coefficients are real and rational, an equation whose curve is found not to cross the X-axis as many times as is indicated by the highest exponent of the unknown quantity, will cross as many times as is indicated by the highest exponent diminished by 2, 4, 6, etc., according to the number of pairs of imaginary roots. Some interesting relations between the derivative curve and the original curve have also been noted during the term.

In addition to the study of the solution and geometrical interpretation of some of the higher numerical equations, some work in arithmetical, geometrical and harmonical progressions, the binominal theorem and determinants has been accomplished.

HENRY LESER.

THE CALLA LILY'S UGLY BROTHER.

WHEN we look at the beautiful, dignified, spotless calla lily, it does not seem possible that any plant related to it could be otherwise. Yet it is true that this pure flower has a very ugly brother, who is so objectionable that he is carefully ignored while his beautiful sister is petted and admired.

He has isolated himself from all other plants, and has found solitude in swampy places in the woods. We find him very near home. At "Crow's Nest" his genus abounds. Here he is busy all the year around, so when other spring flowers are making up their minds to put in an appearance this diligent "hermit of the bog" has already lifted his hooded head out of his muddy bed and is enjoying the fresh spring breezes.

He does not resemble the calla lily except that the purplish spathe answers to the pure white, petal-like leaf of the calla. The spathe differs from the white leaf of the calla in that it droops over, sheltering the spadix within as in the Jack-in-the-pulpit. When the spadix, or round, fleshy head begins to lengthen, the spathe dies off and the spadix then grows into seed. It forms a fruit resembling a papaw, except that it has a sealy, outside covering. This pod contains a soft, yellow, custard-like substance, and in this are imbedded the round, black seeds.

The large, heart-shaped, netted-veined leaves are bright green, and possess qualities pleasant to lower animals, but objectionable to man, the juice being acrid and narcotic, and when broken the plant gives off an offensive odor which has won it the name of "skunk cabbage." It is also called bear-weed, for it is said that bears are fond of the fresh, green leaves. This is odd, as the acrid juice causes severe, darting pains through the tongue.

Another peculiarity of calla lily's disagreeable relation is that the root contains a juice which, if taken, would cause blindness. By these various ways this ugly member of the Arum family can revenge himself on others. CLARA DIPPEL.

TECHNICAL DEPARTMENT.

THE WOODWORKING SHOP.

IN order to enable the boys of this city to train both the mind and the hand, the citizens of Indianapolis have erected the Industrial Training School on South Meridian Street.

On the second floor of the north building is a room fifty by ninety feet, known as the woodworking shop. It is heated by steam and lighted by windows on four sides. About one half of the wall space is given to windows. The windows are provided with shades.

The shop is equipped with thirteen double joinery benches, twenty pattern-maker's benches, twenty lathes, four pattern-maker's chuck lathes, one large pattern-maker's lathe, two circular saws, one band saw, one jig saw, two planing machines, two grinding machines and a universal trimmer. On the southwest corner of the shop is a tool room. It is partitioned off from the rest, and contains a collection of special tools. The shop is also provided with an assortment of tools used in carpentry and turning, for the use of the bench work, turning, and pattern-making boys.

Upon entering the shop we see forty-five boys, working with might and main at the exercises which the instructors have given them. Each day one of the boys of the class is detailed to this department. It is his duty to become familiar with the names of the tools and to furnish them to the other boys on checks. The forty-five students are in two classes—twenty-five in the bench class and twenty in the turning or pattern-making class. At present there are three classes a day in bench work, three in turning and one in pattern-making and foundry work. The pattern-making boys are in the woodworking shop only a part of the time. We can accommodate one more class in bench work, though another year will probably see the limit reached.

In the bench class two boys work at each bench. Each boy has, on his side of the bench, a vise for holding work which he may be fitting, and a stop for holding stock which he may be dressing. He has, also, a drawer in which to keep his individual tools. On each side of the bench is a press in which are kept the general tools; *i. e.*, the tools which are used by all the classes. They consist of a hammer, mallet, saw, square, gauge, level, dividers, rule, screw-driver, oil stone, brace and box of bits.

The first work this class has to do is in squaring up stock and laying off work. This is followed by exercises in boring and chiseling, and this by work in making joints. From this on the work is more of the nature of individual work. Cabinets, brackets and newel posts are constructed, each boy making one or more parts. All the work is such as tends to make the boy think what he is doing. He must know how and why he makes each cut.

The second half year's work is in turning. Each boy is assigned to a lathe at which he is to work. He is given four tools and shown how to use them. Later on he is given two more tools. With the six tools he can make all the cuts used in turning. The boys are warned of the peril in careless movements about machinery and then set to work. The first exercise is in turning a straight cylinder. The work then becomes more and more

difficult until it can be done accurately and rapidly. The boys then make more useful articles, such as mallets and stands. The work in turning is completed with a few simple exercises in pattern making.

It is not the intention to make tradesmen of the boys. They are in the shop ninety minutes every day, five days in the week. In one term this amounts to one hundred and fifty hours, or fifteen working days. Some allowance should be made for loss of time in changing classes and by the exercises in the school hall. It would be impossible to take a boy sixteen or seventeen years old and make a tradesman of him in so short a time. That is not the purpose. It is intended to teach the boys how to use and care for tools, to give them general information, and teach them how to combine mental and manual labor. Every student has to carry work in English and mathematics along with his shop work.

Thus it is that the man of the future will both be an educated man and understand the use of tools. ED HAINES.

SCARLET AND WHITE.

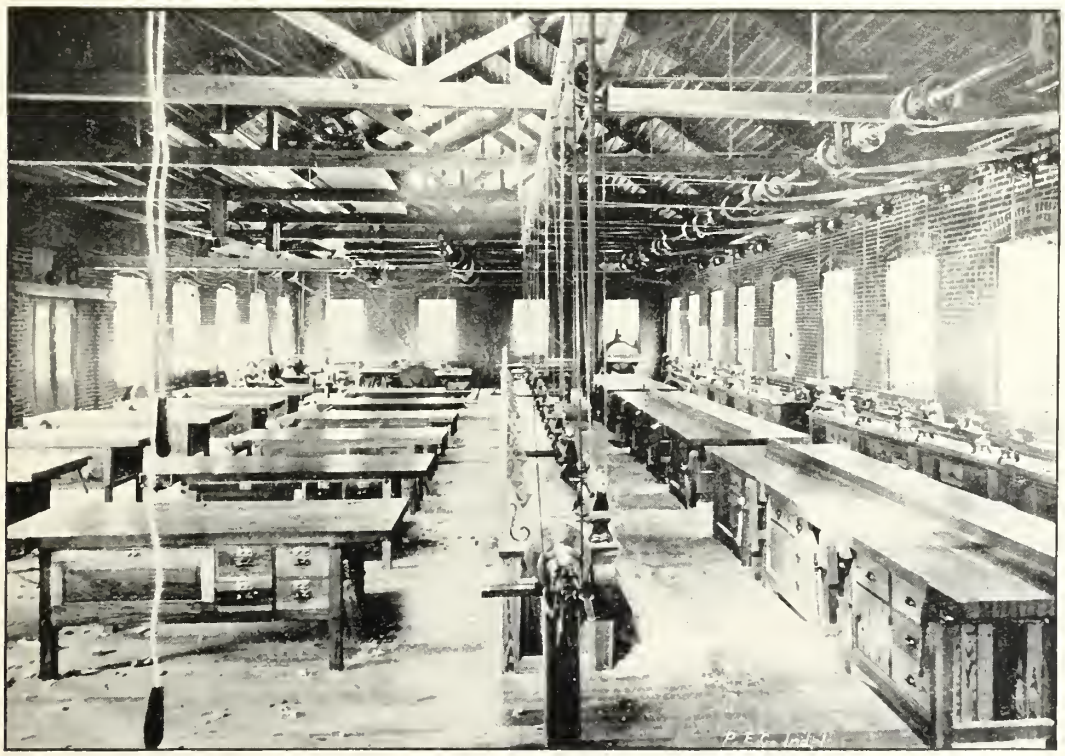
They're scarlet and white,
Who says they're not right?
These colors of I. T. S.

Let him who would
Term them no good,
He's a traitor to I. T. S.

But loyal is he
On whom the colors you see,
The colors of I. T. S.

Three cheers for the white,
And the scarlet's all right;
They're the colors of I. T. S.

Long may they be worn,
And the students adorn,
The students of I. T. S. L. R.



WOOD-WORKING SHOP.

FORGING.

FORGING as taught in the Industrial Training School is one of the most interesting subjects, both to pupils and visitors, that is found in the mechanical course.

Any work which requires thought and constant attention becomes pleasant, and forging undoubtedly requires both. This is illustrated by the three-pronged barbed steel fork which the boys have just been making. Steel burns very easily, and when once in the fire must be constantly watched; it will not do to leave it a moment, for in just that moment it may burn. Or if a boy thoughtlessly dips his steel into water while hot he might as well try to work glass as that steel.

Another feature of forging which gives a boy good training is the great need of care from the FIRST. The first step in any exercise must be as careful as the last, for each step depends upon the one previous. If a mistake is made early in the work it is almost impossible to rectify it by careful work afterward. If a chisel slips, if a fuller is set in the wrong place, if the helper strikes too quick, or if the material becomes too hot, the work is spoiled. After a mistake of this kind has been made it is sometimes possible to partially correct the error, but the benefit of the work has been lost.

For the benefit of any who do not know the method of teaching such a subject as this, it may be well to say a few words in explanation. For this purpose let us take the making of a hook—apparently a very simple thing to make. Before the boys begin work the teacher carefully explains to them the points to be considered in making a hook. He explains where the point of greatest strain is, where the weakest and strongest points are, and all facts of this kind. Next he makes a hook before them, carefully explaining at each step the reason for everything. At the same time he inspires the boys with confidence in themselves, and when they go to their forges each boy feels confident that he can do the work. When a boy has confidence in himself nothing is impossible to him.

This all goes to show the reason why every boy should take forging, if possible. It not only teaches the use of the blacksmith's tools but it develops and quickens the mind and hand at the same time that it relaxes the mathematical and literary part of the brain. A boy who takes forging will undoubtedly be able to do more and better work than if he did not take it.

F. F. BALLARD.

FOUNDRY CLASS.

THE foundry class is the object of great interest at present. This department of the Industrial Training School began operation January 27, 1896. There are twenty-four of us, every one willing to help make the class a success. Mr. Cox, our instructor, is very enthusiastic in his work, it being his object to have our class make its best possible showing.

Briefly speaking, "molding" is the art of making forms in sand. Into these forms or molds, molten iron is poured.

Some of the difficulties that a beginner in foundry work has to contend with, is his awkwardness in handling the tools necessary to do good work. The sand that we use for making molds must be "tempered," that is, made damp and well mixed before it is fit for use. The mixing is accomplished by means of shovels and boys behind them who like exercise and get it by throwing the sand around promiscuously.

This part of the foundry work comes about as near being "labor" as any. One

of the difficult things to learn is how to correctly "riddle" sand. "Riddling" is the shop-term for sifting.

Generally speaking, molding requires a good deal of ingenuity on the part of the molder. He must be careful to place his pattern into the sand in such a position that it may be easily removed without injuring the mold. It is rarely the case that two patterns are alike, hence the molder must devise a new scheme for each pattern.

Of course, our class will master these little difficulties, in spite of the fact that one of the teachers was so unkind as to call us "mud-daubers."

It is a part of Mr. Cox's plan of instruction to give lectures on foundry work and on the metallurgy of iron. We have had several lectures on foundry work so far.

The cupola has been lined with fire-brick, so that we are now prepared to melt iron, or "run a heat," as the foundryman would say. On these occasions it is necessary that extra precaution be taken to avoid accidents. For this reason each one of us has been assigned a post of duty, something on the plan of a fire brigade. There is enough danger connected with this part of the foundry work to make it fascinating. We are anxiously waiting for the day when we will go on duty and pour the hot liquid iron.

As a part of our studies we have made two shop visits. These visi s give us an opportunity to learn the various little "tricks of the trade" and enable us to study the methods employed in the management of foundries.

In this way we are from day to day endeavoring to become more proficient in the trade of the foundryman, a trade by no means to be despised. WM. NOELKE.

FOUNDRY.

PATTERN MAKING.

THE pattern-making department was established at High School No. 1 in September, 1892, under the supervision of Mr. Bass. The work done the first half year was elementary work, mainly exercise patterns, very few being useful ones. In the second and third years common forms were made; also some engine patterns. The work continued at No. 11 until this school was opened. Then for one year there was no pattern making taught. The pupils who had taken it went into the forge room. After a year in this department they returned to pattern work, with Mr. Cox as instructor The boys found that they had become inaccurate and unaccustomed to handling the tools, and a few days were required to regain the skill formerly acquired. To do this each one made a simple pattern. Afterwards the patterns for an engine were taken up, and when they are finished the castings will be made in the foundry. This engine will not be a toy, but a real, working model, of twenty-five horse power.

Some of these patterns are very complex, and require a great deal of study and foresight. Each one must be made so that it can be drawn from the mold easily. Many times there are several ways to make the same pattern, and different persons will say that their way is the best. The best way, however, is not always the easiest for the pattern maker; the pattern must be made so that it can be molded easily. A great deal of care must be taken that the pattern will come out of the sand. For this purpose "draft" is made on its sides. If there were no draft on a pattern the pattern would be apt to pull the angles and corners of the mold out, and so spoil the mold.

Owing to the amount of study and forethought required, and also to the short time allowed each day for work, no great showing can be made in this department. The engine is probably an ambitious undertaking, and the boys will feel well satisfied if it is accomplished this year. The work is progressing rapidly, and the outlook for its completion is very bright.

MURRAY ECKMAN.

COOKERY.

OUR school is of especial interest, because part of it is devoted to instruction in the industrial arts. That the cooking class is a chief attraction is evident from the number of visitors we have; none are satisfied without having seen the girls in their white caps and aprons working in the laboratory.

This work is not only interesting, but is valuable to us who are members of the class. Theory and practice are combined in our work, the one which tells us the *why*, the other which shows us the *how*. Which is of greater consequence, I fear to ask. It is useless to say that one sex at least would cry "Away with theory; theory will not keep us alive; just practice, and plenty of it, is all we care for." But, dear sirs, do you not know, that but for your mothers' or your wives' theory, though it may be all unconscious on their part, you would not have the fine light loaves of bread you like so well, but instead you would have placed before you a heavy, soggy mass, which you would eat probably without remark, but with much wonder as to where the fault lay. It was simply this: In the baker's theory she had forgotten that the yeast germs need the proper conditions of heat and moisture. If cooks have their theory well mastered, the practice will be much easier and far more successful.

There are certain elements necessary to our food, and these we learn in our study

DINING ROOM IN COOKING LABORATORY.

of the food principles. The year's course has been carefully planned and arranged that this fundamental work in the science of cooking may gradually be unfolded as the weeks go by. There is not a thought, not a feeling, not a motion, but is accompanied by the tearing down of some of the cells, either of mind or body. Repair for the waste, material to build up the tissues and to give us energy—indeed everything must be supplied by our food. To teach us the right kinds and proportions of this food is the object of our work in the food principles

Not least important of the lessons which we derive from our study of cooking is the principle of economy. We have ever before us in the laboratory Rumford's celebrated quotation on the detriment that "unmeaning waste" brings to mankind Our definition of the best food is that which is both healthful and cheap.

For some time past we have been spending one lesson a week in dinner-work, that is, learning how to prepare and serve a six-course dinner. The girls enjoyed the time heartily, especially on days when they were guests and had no work to do, except to go through the motion of four courses and devour two with a relish only worthy of the cooking itself. But it was not all fun by any means; we received many practical lessons. While we had already known some of these things, still there were many which we must confess were new to us.

The latter truth was evident from the mistakes that were made, the questions that were asked, and the prompting that

had to be done during the first few lessons; but by the time this work had been completed, we felt as if we knew, at least, how to arrange a table and serve the courses, even if we were not as yet expert in the art of preparing food, which perfection will come, of course, only with thought and practice.

From these facts it can be seen that the cooking course is not play; it is not making "sweet little loaves of bread," "cute little pies," and delicious doughnuts to pass around among the girls after class time, and probably to the boys if their lives are insured. It is pleasant work; it is the study and practice of a science and art which the world could not do without.

NELLIE BOWSER.

SEWING ROOM.

THE SEWING ROOM.

IN the first year of the sewing course all the work is done by hand. A number of models are made for the purpose of learning the different stitches, the way to hold the needle, to use the thimble and various other things. An apron, which is a test for the sewing that has been learned, is also made.

The girls all worked diligently and looked forward with eager expectations for the second year. In the second year, which is more interesting, the work is done by means of the sewing machine.

The girls thought it would be a great source of pleasure to run the machine, and besides it would be an easy, pleasing task. Their eyes sparkled as the bolts of muslin, the stacks of dainty laces, the beautiful white India linens, the figured lawns and dimities appeared.

There were many sad and discouraging days, too, for the girls' feet refused to run the machine properly. Sometimes, when starting to sew, the wheels went backward

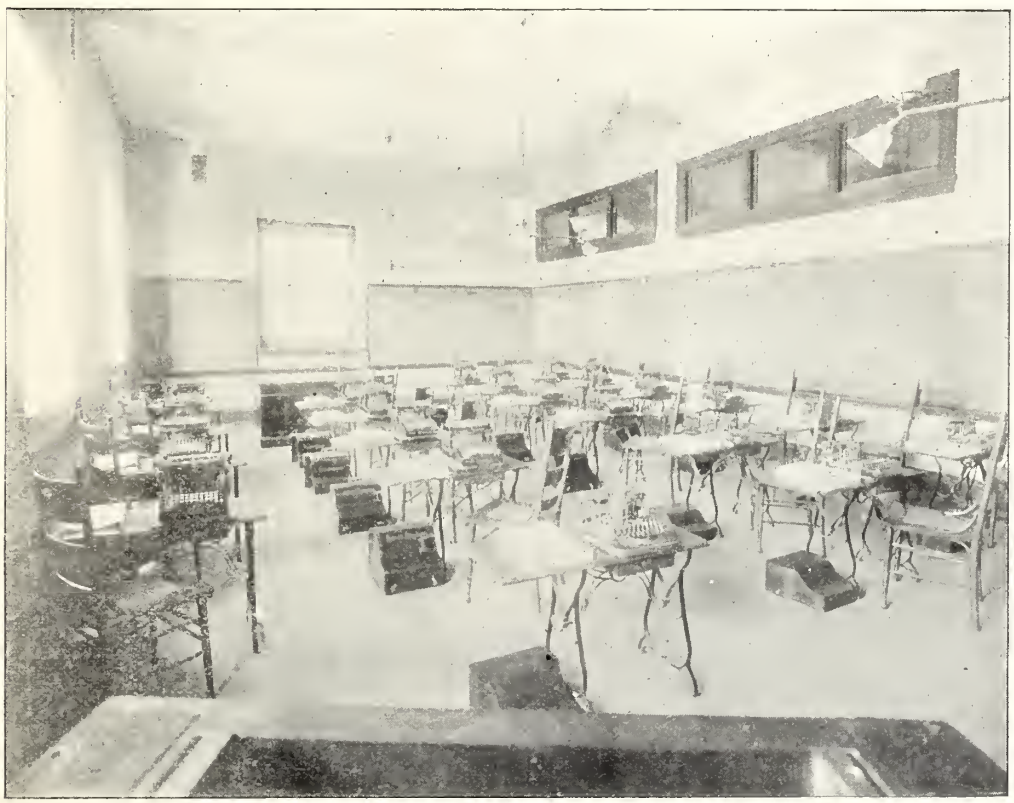
instead of forward, or the thread broke at every turn. When the garments were to be cut came a still harder task. The girls often made queer mistakes, such as cutting two sleeves for one arm.

Twelve machine models and five garments are completed during the second year. The garment is to show your best work, and should be kept very clean, for at the end of the year, when each piece is marked, the cleanliness as well as the sewing is taken into consideration. A neat and beautiful sewer is one who can keep her work clean.

This course is of great advantage to a girl, for after completing it she is able to make almost all her clothes. Even if it is not one that requires hard study at home, it does require study and hard work during the two hours at school. Close application is required during this time in order that we may complete the work set before us.

It gives one pleasure to devote his time to such a pleasing subject, and we are always sorry when our time is over. Taking it all in all, this course not only teaches how to sew but it promotes the mental activity.

LENA LESER.

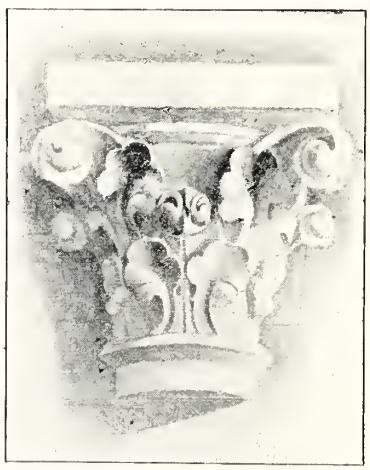


TYPEWRITING ROOM.

ART DEPARTMENT.

THE Century collection of original illustrations has done more for the drawing department of this school than any other one thing. The good that has been accomplished is a double good.

It has corrected the ideas of the people who had the expectation of seeing the fine illustrations alone as objects of interest. They have seen that there are other things here that are as beautiful and quite as instructive as the illustrations.



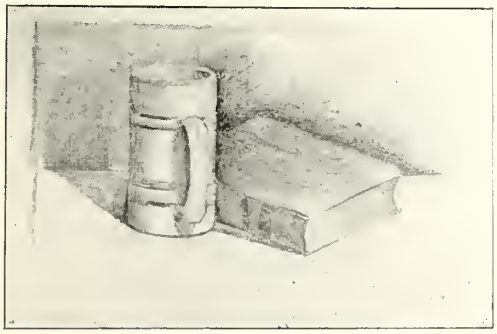
The drawing department has been helped by the knowledge that it is a complete and competent establishment which not only can command, but can hold the universal indorsement of the artistic public.

When it first became known that that new Manual Training School had such a fine thing as a set of drawings which had been sanctioned by the Century Publishing Company, the general public, which is, after all, a little slow in seeing the beauties in its midst, decided that it had better go and see those pictures. So every day some of its members drifted in, and, after seeing all that there was to be seen, went away satisfied and secretly pleased that they had got more than their money's worth.

Day after day, as new groups of strange faces appear, those interested in the progress of the work and public acknowledgment of merit have noticed that a shorter part of the time spent in the drawing rooms sufficed to satisfy their interest in the pictures, and that they turn from them to inspect the fine casts and also the pupils' work.

Every day brings more new faces, and by this we know that those who have come and gone have spread the fair name of our school.

Everything here is of the best. The casts are reproductions of the essence of what is good in both ancient and modern sculpture.



There is a freedom granted to the pupils of this department that is quite a new feature, and there is also a notable absence of that belittling, minute watching which has been falsely termed care. One is made to feel that he is allowed freedom without lawlessness and plenty without waste.

The method of teaching is much the same as the belief as to the care of the casts, desks and other property.

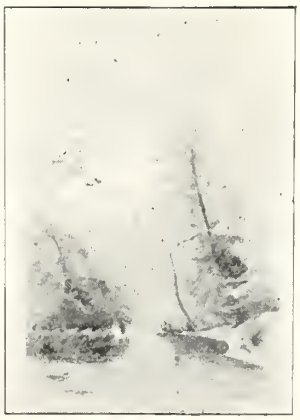
Altogether this is the most thoroughly artistic and charmingly conducted class of work that has ever been taught in the public schools of this city, or, for that matter, of that in any city, for this new work is far in advance of anything that has been done in this line before.

EUNICE JAMESON.

OUR REPRESENTATION AT THE LAST EXHIBITION.

AT the Western Drawing Teachers' Association, which held its third annual meeting at High School No. 1, the I. T. S. was only fairly represented. The north end of the second floor corridor was

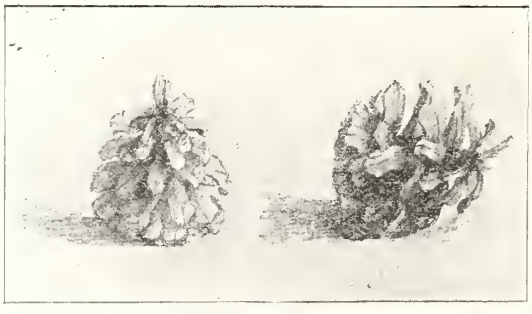
devoted to the wood working and art drawings. A few water colors, some charcoal work and many pen-and-ink sketches comprised the I. T. S. exhibit. The water colors did not compare favorably with those of No. 1, but the pencil and pen-and-ink work, taken as a whole, was better than the North Side work. No. 1 had far more charcoal work than the I. T. S. We students have some formidable rivals at the North Side, among which are Laura



Scott, whose charcoal work expresses great freedom and originality; Carl Ludwig, whose work is very careful and painstaking, and Daniel Ransdall, whose pencil and pen-and-ink sketches show artistic taste

and finishing. However, the North Side also has rivals in us. Alexis Many, Morris Breuning, Eunice Jameson and Alice Hughes have work exhibited, work which can hardly be said to be the best they can do. They are represented in the cuts of this paper, the cover being designed by Alexis Many, and title pieces and ornamental letters drawn by the others. There are many other South Siders who need but a little practice and hard work to make them as strong in their work as the pupils before mentioned, but there is not space to name all the rising artists. The writer feels sure that next year, at some other exhibition, the I. T. S. will have a still stronger and better representation.

V. Egan.



I. T. S. A. A.

THE Athletic Association has made good progress during its short existence, and its members look forward to a successful season next fall. As the Association is yet in its infancy, the full effect of its influence has not had time to show itself.

The membership now numbers about twenty five, and includes a good portion of those interested in athletics at the School. It is to be hoped that the others will join us soon.

The following officers were elected: President, John Good; Vice-President, Murray Eckman; Secretary, Morris Brunig; Treasurer, Morton Traub; Sergeant-at-Arms, F. Queiser.

At the resignation of the Vice-President, Louis Mayer was chosen to that office.

Directors have been elected, and everything bids fair to make the Association a success.

Our good friend "Mary" has left us. Let us weep.

NOTICE.—The Athletic Association hereby gives notice of a prize to be given to the person giving the best method of collecting dues. For further information apply to the Secretary.

Considering the pictures and charts arranged upon the walls of the meeting room, it is a good thing for the members that the meetings of the Athletic Association are held after dinner. L. M.

THE I. T. S. BASE-BALL TEAM.

IN the School there is plenty of material to form a fine team, and after it has practiced more a decided change for the better will be seen.

It is causing much comment that the captain did not choose a catcher from the School. But none of the School boys are up to the standard, so an outsider was chosen, which was done successfully and much to the benefit of the team. Nearly all the positions have been fully decided upon.

O. Quisser is the outsider chosen to catch. He plays his position well and is a fine batter. F. Quisser and W. Parker are the pitchers, both being very good. While one is pitching the other plays second base, thus by this it keeps two good men in the game all the time. Parker is the only left-hand batter on the team, and he is among the best F. Quisser is captain. He is a good one, although sometimes he loses his temper. Warren and Boaz are contesting for short-stop. There is a slight preference in favor of the former. Both are good on ground balls, but Boaz is not certain of flies. Warren has the advantage in batting. The applicants for first base are McIntosh, Smith and Griffin. Of the three, McIntosh has proved to be the best, he being a better batter than the other two and fielding that position equally as

well. Smith, with a little more practice, will become a good catcher.

Kerr, who is manager of the team, plays third baseman. He is an erratic player. Sometimes he plays a beautiful game and at other times just the opposite He is a fairly good batter. Camp covers left field. He gets over lots of ground and is a sure catcher, besides being a fair batter. Bronson plays center field, to which he seems especially adapted on account of his excellent judgment of high flies, and throwing his ability. He is up to the average of the team in batting. Goode is right fielder. Although he is a little unsteady at times, taking all together he is a good man. He is quite a good batter, besides being an excellent thrower.

The team got its suits, which were furnished by the Patee Cycle Co , Wednesday, April 15. The appearance of the team is much improved, and now the boys seem to take more interest in the game. W. B.

THE CADETS.

AT last we have a military company, a thing for which many boys have long been wishing.

Our drills are on Wednesday evening, and are well attended by earnest, enthusiastic boys, who pay strict attention to our most able drillmaster, Mr. McCrea, and should you drop in on Wednesday evening about 8 o'clock, you would hear the merry tramp, tramp of the boys in response to the commands of our leader.

We were more than fortunate in securing Mr. McCrea as a drillmaster, as he understands what he is about, and, after he is through with us, we will surely understand the life of a soldier a little.

We rent Company A's armory, on West Pearl Street, of the National Guard, and, after we procure our uniforms, no member of the I. T. S. need be ashamed of the Cadets. H. K. T.

ELEMENTARY PHYSICAL LABORATORY. (North Half.)

THE CLEAVER OF THE BLUE.

'Tis Thursday night and I must write
A poem for the morrow.
It must be right, in black and white,
Or it will cause me sorrow.

The Indiana battleship's a good ship and a true,
And they say it is a wonder the way she cleaves the blue.
She is a good old battleship, and I would like to see
Her engaging with the navy of our neighbor, Johnny B.

Not long ago and editor, of an Indiana town,
Said he was patriotic, and actually went down
Into his pocket and pulled out a hundred-dollar bill;
This started others giving with a free and hearty will.

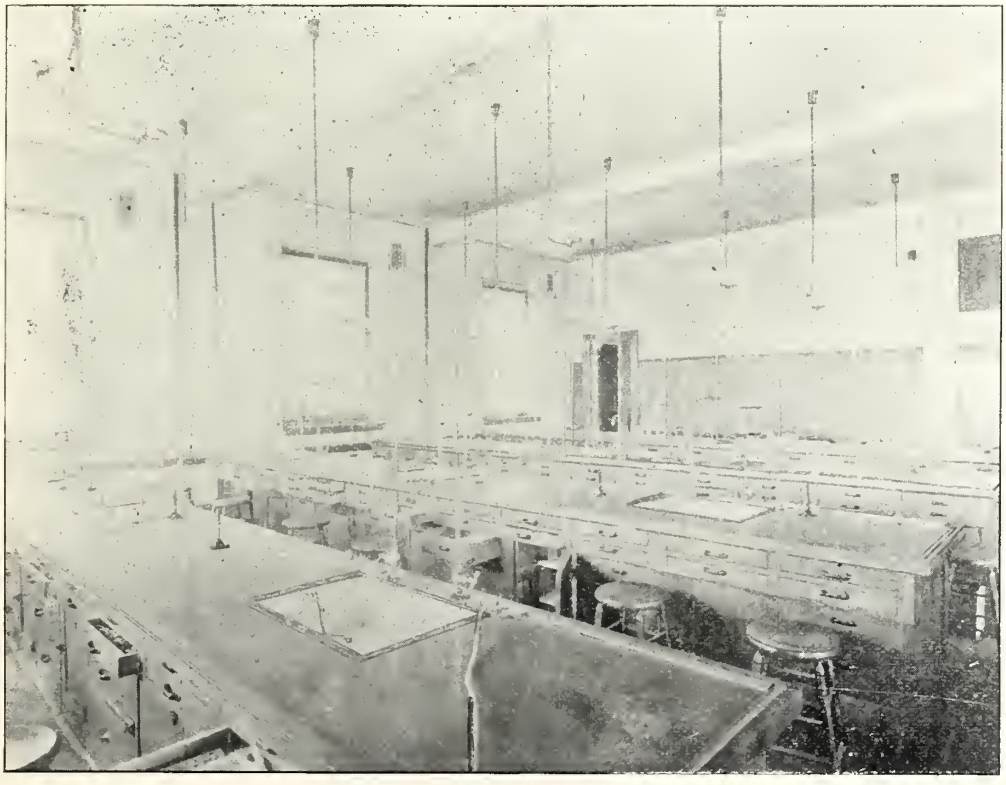
And, if you will believe it, the offerings in the State
Were enough to buy the battleship a set of silver plate.
This proves that people of the State are loyal and are true,
And are proud of their new battleship "The Cleaver of the Blue."

I hope you'll be indulgent with this jingle here of mine,
I started it at half past eight and finished it at nine.
If the teacher will accept it I'm sure I shall not rue
The writing of this poem, "The Cleaver of the Blue."

CHAS. WILSON.

MR. EMMERICH delivered a lecture on the Rhine country, before the members of the School, Friday, May 8. The lecture was illustrated with stereopticon views, from plates specially prepared for the occasion by Mr. Bass. The entertainment was novel and interesting, and thoroughly enjoyed by all present. The most interesting and certainly the prettiest views presented were not taken from along the Rhine, but in the neighborhood of White River, namely, the pictures of the February and June classes of '96.

MR. EMMERICH has received notice from Chicago University and Michigan University, stating that, after a thorough examination of the I. T. S. by committees from each University, graduates from this School will be admitted to these institutions without examination, upon certificate of the Principal.



ELEMENTARY PHYSICAL LABORATORY. (South Half.)

MISCELLANEOUS.

JOTTINGS.

As the Cox crowed in the morning, a Sturm came along with lots of Noyes, destroyed many Beans and Thisselles, blew over trees and Prest-on through the country, causing great Payne and suffering.

Among the various organizations of our school is the Senate. An amateur society, to be sure, composed of amateur senators, yet it has been of much benefit to many pupils. If one is a senator, he is almost compelled to keep up with current events, either by reading on the subjects for discussion or perhaps by listening to what the others say, if he be too bashful to talk. Also a knowledge of parliamentary laws is obtained. However, the real value of the Senate is the reading and the consequent speaking that it brings forth. The value of this work can easily be seen. In fact, the Senate is a complement of the Civil Government work.

"Why is your head like a sound wave?" asked a bright girl of a conceited young gentleman. "Why, I don't know," said he. "Because it's a constantly increasing sphere. See?"

The orchestra is an institution of which the I. T. S. students are deservedly proud. Its pleasing help on festive occasions, often on short notice, have won a place for it in the hearts of the pupils. The members are: Harry G. Cox, Director; first violins, Edgar F. Kiser, President, Otto D. Leffler, Gertrude Heim, Frank Martin; second violins, Albert Kahn, Morton Traub, Albert Richt; violincello, Ernest Burford; cornet, Walter Eckhouse; flute, Irvin Bertermann; piano, Lilian Adam, Librarian; trombone, Emil Catalano.

"Look here, boys," remarked a certain gentleman who teaches drawing, "if you don't stop talking I'll get red-headed!"

Stenography is a fascinating study from alpha to omega. First, the struggling with the forms, then the learning of the abbreviations, then the practice for speed in writing and reading, then a general review, and forth steps the full-fledged stenographer. In type-writing, speed and accuracy are the *fata morganas* of the first year students and the happy laurel for the graduates.

The English class was discussing novel-reading, when one boy remarked: "The reading of trashy novels often causes boys to go out West. Why, just last week a youthful novel-reader wrecked a train near Buffalo, N. Y."

FAVORITE EXPRESSIONS AND SENTIMENTS OF SOME OF THE FACULTY.

Mr. Thisselle: "Down with England!"

Miss Vail: "But civilized man can not live without cooks!"

Mr. Noyes: "J-e-e-e-s' draw it in simple!"

Miss Thompson: "It's dreadful! Fearful! I just can't have it!"

Prof. Emmerich: "Hm! hm! I have a few announcements to make!"

Miss Foy: "My forty 'leven different kinds of trash" (meaning the painstaking compositions of the pupils).

Mr. Cox: "It's perfectly charming!"

Mr. Keesling: "Want to buy a note? Cheap!"

Miss Sturm: "Keine Unterhaltung!"

Mr. Grummann: "Nomen quod significat!"

An exclusive literary society, known as the "Sartor Resartus," is one of the praiseworthy outgrowths of a class organization. It was founded during the last term by members of the "June Class, '97." The object is a deeper study of Carlyle, which is pursued under the direction of Miss Foy.

THE Book-keeping work is extremely interesting. To the consternation of the pupils Mr. Thisselle has failed, paying about fifteen cents on the dollar to his many creditors. The young lawyers of the school have been called to the front, and there are many suits on hand. Mr. Thisselle hopes, through his failing, to give the pupils a wider insight to the feints and wiles of law and business.

ANSWERS REQUESTED TO A FEW QUESTIONS AN ASPIRING I. T. S. STUDENT WOULD LIKE TO ASK.

Why does the editorial staff call J—n F–nz–l "the Kicker"?

What boy on the second floor played with dolls a year or so ago?

Whence arises the name "Die Taube" for I–v–n B–rt–m–n?

How it happens that the custodian has eyes in his elbows and feet, to say nothing of an extra pair in the back of his head?

Why F. F. B–l–rd is called "Ducky"?

Whether the teachers in the Auditorium think example more powerful than precept?

How J–n W–n–ngs' name of "Baby" arose?

Why Room C is called a poultry room?

Where H. K. Th–ch–r procured that frown and twist of the lip?

The reason for H–w–rd Y–ng's being called "Chickie"?

Whether A–th–r M–n–'s forefinger, pointed, is his chief delight?

Whether "Grapes" is sour or sweet?

How many quarrels the writer will find himself in after the publication of these questions?

"HM, hm!" began the clever boy who had neglected to study his lesson, and had been requested to state a fact about the Hungarians, "since the Hungarians were the most civilized of all the tartar tribes, they were called the cream of tartar."

SOME PREDICTIONS OF THE PROPHET OF THE CLASS OF FEBRUARY, 1896.

A PROPHET is born in the Minerva style, either springing full grown from the head of a god or springing full grown from Pluto's incubator. The great prophets generally come to the earth on a thunderbolt, the lesser ones must be content to come on a broomstick. I don't exactly remember which way I came—I only know I came.

Once upon the earth his first business is to consult the great philosopher, Common Sense, from whom he shall obtain the following rules:

"Be truthful when you do not find it convenient to lie."

"Love your neighbor as he loves you."

"Do unto others before they do unto you."

"Commence your search for a woman when Diogenes has found a man"

"Worship beauty when it is not accompanied by petticoats."

"Get married when you are tired of good living."

The prophet must, of course, go to the fates, and I shall now tell you what was revealed to me, as, guided by them, I traversed the dark paths of the future.

Our first stopping-place was before a large, elegant stone mansion. Peering through the windows I saw a sight which would make the old gentleman himself feel fatherly Seated in a huge arm-chair, smoking his pipe and looking the picture of happiness was a tall, rawboned individual, engaged in knitting a pair of socks. In the most quiet-looking corner of the room a fat, comely, good-natured lady was busy at her desk, while on the floor eleven rosy-cheeked youngsters were tumbling about. The short and long of all which is that during the "Woman's Reign" Mabel Stilz, the short of it, amassed a fortune in the baked-bean business and then married her old schoolmate, Robert Smith, and that's the long of it. As we turned to depart, Clotho accidentally stubbed her divine toe and gave utterance to a very undignified howl, whereupon I heard Mrs. Smith say: "Pa, run upstairs; I believe Egmont has fallen out of the cradle." You see they had remembered me when they baptized the last of the dozen.

If ye have tears to shed, prepare now. If ye haven't any, manufacture a few for the occasion. Our next call was at the corner of Washington and Illinois Streets. There, seated upon a small, cross-legged stool, with a large basket on his knees and a little cooking apparatus at his side, was a black-bearded, red-nosed, piratical looking chump, inviting the public to a feast of hot wiener-wurst. He gained great renown in the wiener-wurst business, did Charles Boaz.

Tearing myself away from this pitiable sight, feeling hungry I prevailed upon Clotho to take me to an elegant restaurant about which she had been telling me.

Just before we entered I glanced at the sign above the door which read, "This restaurant is conducted on the I. T. S. cooking laboratory plan, proprietor Clara Dippel." As I took up the bill of fare I noticed at the top this encouraging advertisement, "After eating here consult at once Doctor Edna Dellet; specialty, dyspepsia: coffins given away." While Miss Dippel's accomplices were compounding my dinner I took up the daily paper and read as follows:

"No. 13 Paradise Alley was to-day the scene of a horrible tragedy. No. 13 has, for the last five years, been occupied by Mr. Henry Leser, his wife and five children. Mrs. Leser is a stock-broker. Lately all of her speculations have panned out poorly, and, driven to desperation, she sought relief in drink. This morning she

went home, after drinking all night. She knocked at the door. Her husband failed to respond immediately, as he was just then washing the baby. Enraged by his delay the wife battered down the door and then she battered down poor Henry, too. It is said that for this bloody deed she will be deprived of her right to vote."

Men do not amount to much in these days.

As I scanned the pages I found other articles of interest:

"As the mountain would not come to Mohammed, Mohammed went to the mountain."

"As it has been found impossible to reach the North Pole, it is said that Edith Conner is making a magnet that will draw the North Pole to us The value of this great invention in summer time can not be estimated. Scandal has it that Miss Conner is in league with the evil one, and that she has caused the death of ten thousand young men that she might obtain from them the fascinating power of their eyes to use in the manufacture of her magnet"

"THE NEWS IN BRIEF."

Charles Simpson was to-day hanged for killing a cat. The punishment was merited, as the murder had been deliberately planned. The cat was accustomed to rehearse love ditties beneath Mr Simpson's bedroom window, preparing to visit his lady love. The monster above having no ear for cat music decided to rid himself of the love-sick serenader. One beautiful, moonlight night, the songster, as usual, tuned his voice beneath the fatal window. Hardly had the first note left his mouth when an object descended from above. A thud—a choke—a gasp—and the deadly boot-jack had done its work. But the deed had been witnessed by a member of the "Old Maid's Society for the Preservation of All Animals Save Man," and investigation, conviction and punishment followed.

"FOREIGN NEWS."

We have to day received news of the horrible death of Miss Clara Bohnstadt. Five years ago Miss Bohnstadt went among the cannibals as a missionary. She was making great progress among these people. With gaping mouth they would listen to her words of revelation.

> But, alas! A famine came,
> Clara had grown fat,
> The cannibals were hungry—
> Need I tell you more than that?

A great idea to-day exploded in Earl Heller's head, killing him instantly.

As the waiter now appeared with the deadly mixture that was to be my dinner, I recognized in him my old schoolmate, Wilfred Vestal. I introduced myself and inquired how he came to be in such a woeful plight. He smiled mournfully and spoke as follows: "After leaving school I engaged in commerce. Everything I touched turned to gold In an evil hour I married. The women gained their rights, my wife dissipated my fortune and then deserted me." As he had proceeded his smile had gradually become more mournful, and yet more mournful, until finally Wilfred had faded away and there remained only that mournful smile.

Thinking over the glorious reign of women, I was myself rapidly undergoing the same transformation, when the fates rescued me

So once more we took wing. This time our destination was the terrible slums of Paris. Arrived there, we flew through the cracks of the most miserable of miserable hovels and there beheld a sight that would draw tears of blood from a turnip.

Stretched out upon the floor, with not even straw to keep her frail body from

contact with the damp floor, lay the wasted but graceful form of a woman. Her face, despite the ravages of hunger and disease, still possessed the beauty of genius. She seemed to feel we were present, although invisible, for with a great effort she raised herself. Her eyes glowed with the fire of immortal genius as she said, "My body shall perish, but my spirit shall live in my songs forever." With pitying hand Lacesis severed the golden thread of life. Thus died the greatest lyric poet the world shall ever see. She has lived unappreciated and neglected; such is the lot of a great genius; but in years to come tears, flowers and commemorating marble shall declare the world's stupidity. Father Time will use his scythe on his own beard before he will think of obliterating the name of Alice Hill.

The fates now began to vanish slowly from my sight when I yelled out, "One yet still remains." "Oh," they shouted, "you mean Doc. Moore; he has been dead a long time. In his twenty-fifth year he burst a blood vessel in trying to do good."

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